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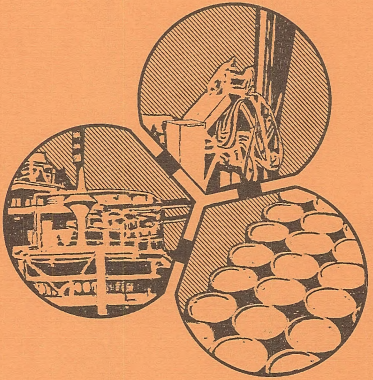

UINTAH BASIN SYNFUELS DEVELOPMENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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U.S. Department of the Interior
Bureau of Land Management
December 1981

Recommended:
Charles R. Tullos
Chief, Environmental Impact Statement Office

Approved:
Robert D. Robinson
State Director, Utah

EIS Preparation Plan:
Uintah Basin Synfuels Development

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EIS PREPARATION PLAN:
UINTAH BASIN SYNFUELS DEVELOPMENT

INTRODUCTION

This preparation plan is for the Uintah Basin Synfuels Development Environmental Impact Statement (EIS) to be prepared by the Bureau of Land Management (BLM) in cooperation with the State of Utah. The EIS was initiated by rights-of-way applications filed by sponsors of seven synfuels projects (Enercor-Mono Power Company, Geokinetics, Inc., Magic Circle Energy Corporation, Paraho Development Corporation, Sohio Shale Oil Company, Syntana-Utah, and Tosco Development Corporation). Each of the projects would be located in the Uintah Basin area of Utah and would be constructed during approximately the same time period. (The White River Shale Project will be treated as a related project as it already has an EIS).

PURPOSE OF THE ACTIONS

Project Purposes

The purpose of each of the seven proposals is to produce synthetic fuel from either oil shale or tar sand to be mined on the project sites. The proposed production level and employment of each project are listed in Table 1.

Major Authorizing Actions

In order to implement each of the seven proposals, a number of Federal, State, and local government actions would be required. The major actions, which would be generally the same for each project, are listed in Table 2. (A major action is defined to be one which will mean either "go" or "no go" for the project.) This is a preliminary list and does not include all reviews, consultations, or approvals. All applicants would be required to comply with all applicable Federal, State, and local government regulations and licensing requirements.

STATEMENT LEVEL

The EIS analysis will be conducted on two levels - site-specific and regional. A site-specific impact assessment will be completed for each of the five projects that are furthest along in their project design and require immediate action on their Federal rights-of-way applications (Enercor-Mono Power - Rainbow, Magic Circle, Paraho, Syntana-Utah, and Tosco). A regional cumulative impact assessment will be completed for the site-specific projects plus additional conceptual projects (Enercor-Mono Power - P.R. Springs, Geokinetics and Sohio Shale Oil) and other major related project developments planned for the Uintah Basin area during the period through (1982-1995). Related projects are listed in Appendix A.

TABLE 1

SUMMARY OF PROPOSED ACTION DESCRIPTIVE DETAILS

Project	Construction Period	Peak Construction Work Force (Year)	Low Level Operation Capacity (bpd)	Full Scale Operation Capacity (bpd)(Year)	Full Scale Operation Work Force
Enercor-Mono Power -					
Rainbow[a] (tar sand)	1983-1985	340 (1984)	5,000	5,000 (1990)	150
P.R. Springs (tar sand)	1985-1991	1,385[b] (1988)	15,000	50,000 (1990)	1,500
Magic Circle[a] (oil shale)	1982-1987	820 (1987)	16,400	31,500 (1988)	1,725
Paraho[a] (oil shale)	1982-1986	2,000 (1985)	10,100	37,800 (1987)	1,500
Syntana-Utah[a] (oil shale)	1982-1994	1,525 (1985)	16,500	50,000 (1988)	2,100
Tosco[a] (oil shale)	1983-1986	3,500 (1986)	22,000	48,300 (1989)	2,185
Geokinetics (oil shale)					
Lofreco (in-situ)	1983-1993	100 (1983-1993)	20,000	50,000 (1992-1993)	1,000
Agency Draw	1983-1985[c]	1,000 (1984-1985)	11,000	20,000 (1989)	500
Sohio Shale Oil (tar sand)	1982	1,350 (1986-1989)	5,000	20,000 (1989)	200

Note: bpd = barrels per calendar day

[a] Site-specific project
[b] Does not include work force required for new town construction
[c] For pilot plant; data for commercial plant unknown at this time

TABLE 2
MAJOR AUTHORIZING ACTIONS

Agency	Project Feature	Nature of Action	Authority
Department of the Interior Bureau of Land Management	Corridor facilities access roads, transmission lines, pipelines)	Grant rights-of-way	Title V, Federal Land Policy an Management Act of 1976 (90 Stat 2750, et seq.) 0 Stat; and Section 28 of the Mineral Leasing Act, as amended.
	Construction materials for plant complexes, roads, etc.	Issue permits for borrow materials	Act of July 31, 1947, as amende (30 U.S.C. 601, 602; 43 CFR 3600)
	Facilities (other project components) not related to rights-of-way	Issue leases and permits	Section 302 of FLPMA, 43 CFR
	Temporary construction activities	Issue temporary use permits	Title V of FLPMA; Section 28 of the Mineral Leasing Act of 192 as amended.
Bureau of Indian Affairs	Corridor facilities (transmission lines, pipelines)	Grant rights-of-way	Act of February 5, 1948. 62 Stat. 17 (25 U.S.C. 323-328; 2 CFR 161)
Office of Surface Mining	Mining activity	Issue mining permit	Surface Mining Control and Reclamation Act, August 3, 197
Department of Transportation Federal Aviation Administration	Stacks at plant sites	Issue air space permit. Provide airport-related air space determination and air space obstruction clearances for project facilities	Federal Aviation Act of 1958, Public Law 850746 August 23, 1952 (72 stat. 749; 49 U.S.C. 1347, 1501; 14 CFR 77)
Environmental Protection Agency	Water collection systems	Issue operating permits	Clean Water Act of 1977 (86 Stat. 816, 884; 33 U.S.C 1251, 1342; 40 CFR 130 as amended)
	Generating station	Issue Resource Conservation and Recovery Permit for treatment, storage, or disposal of hazardous wastes	Resource Conservation and Recovery Act of 1976 (42 U.S.C 6901; 40 CFR 260-265)
	Water discharge	Issue National Pollutant Discharge Elimination System (NPDES) Permits	(40 CFR 121-125, 133)
	Drinking water	Issue Underground Irrigation Control Permit	(40 CFR 146)
Federal Communications Commission	Communication	Issue licences to operate communications system	FCC Rules and Regulations (Volumes, parts 90 and 94, 47 CFR)
Department of Defense U.S. Army Corps of Engineers	Dredge and fill material	Issue construction or Section 404 permits	Clean Water Act of 1977 (86 Stat. 816, 884; 33 U.S.C 1251, 1344, as amended)

TABLE 2 (Continued)
MAJOR AUTHORIZING ACTIONS

Agency	Project Feature	Nature of Action	Authority
U.S. Department of Treasury Bureau of Alcohol, Tobacco, and Firearms	Transport and use explosives	Issue permits to purchase, store, and use explosives	(27 CFR 181)
Department of Agriculture U.S. Forest Service - Uinta National Forest and Wasatch National Forest	Product delivery pipelines (including access, field offices, and staging areas)	Concur with BLM in issuing rights-of-way on National Forest areas	Title V of the Federal Land Policy and Management Act of 1976 (90 Stat. 2776, et. seq.); Section 28 of Mineral Leasing Act, as amended
UTAH DEPARTMENT OF NATURAL RESOURCES AND ENERGY			
Utah Division of State Lands	Mineral extraction	Administer state mineral lease	Utah Code Ann. 65-1-18; Utah Rules and Regulations Governing the Issuance of Mineral Leases
	Corridor facilities (access roads, transmission lines, pipelines)	Grant rights-of-way	Utah Code Annotated (UCA), 1953 as amended, 65-2-1
	Corridor facilities (access roads, transmission lines, pipelines)	Special use permits for State lands	
Utah Division of Oil, Gas, and Mining	Mining operations and reclamation	Approve Notice of Intent to Mine	Utah Code Ann. (40-8) and Rule M-3, Board of Oil, Gas, and Mining
Utah Division of Wildlife Resources	Synfuel project corridor facilities	Easement across state wildlife resource lands	
UTAH DIVISION OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH			
Bureau of Air Quality	Processing facilities, generating stations	Issues PSD Permits for stack emissions	Clean Air Act of 1977, as amen ed (43 U.S.C. 1701; 40 CFR 42.21); Utah Code Annotated 19 as amended, 26-13-1.
Bureau of Public Water Supply	Drinking water	Reviews and approves drinking water sources and systems	Utah Code Annotated (UCA) 1953 as amended, 26-12-1
Bureau of Solid and Hazardous Waste	Solid and hazardous wastes	Permitting solid and hazardous waste disposal sites	Utah Code Annotated (UCA) 1953 as amended, 26-14-1
Bureau of Water Pollution Control	Waste water	Permitting sanitary and industrial waste water treatment facilities	Utah Code Annotated (UCA) 1953 as amended, 26-11-1
UTAH HIGHWAY PATROL	Synfuel project sites	Issue overweight truck permits for delivery of materials to plant site	Utah Code Annotated (UCA) 1953 as amended, 27-12-155
Utah Counties			
Duchesne County	Corridor facilities (product pipelines)	Issue permits and approvals	County ordinances (building and zoning)
Grand County	Plant development, corridor facilities (access roads, transmission lines, pipelines) & new town	Issue permits and approvals	County ordinances (building and zoning)
Uintah County	Plant development, housing features, and corridor facilities	Issue permits and approvals	County ordinances (building and zoning)
Other counties	Corridor facilities (product pipelines)	Issue permits and approvals	County ordinances (building and zoning)

SCOPE OF THE EIS

The scope of the Uintah Basin Synfuels Development EIS was derived from issues and priorities identified through the public scoping meetings (see Appendix D for a summary of results), input from the Uintah Basin Synfuels Development Steering Committee, and preliminary research done by the EIS preparers (resource specialists from the Bureau of Land Management). Letters and other written submissions were also considered.

The EIS outline, including the scope of various sections, is found in Appendix B.

Proposed Actions and Alternatives

General descriptive data for each of the seven proposed projects are shown on Table 1. More detailed descriptions of the projects are included in Appendix C.

The EIS will analyze significantly different alternative actions (alternative ways, means, or locations which must be technically feasible and reasonable available) which provide similar benefits with different environmental impacts.

The types of alternatives that will be considered for each site-specific proposed action include the no-action alternative (decision not to grant required Federal permits or rights-of-way), design alternatives (component-such as alternative product transportation systems or shale disposal; process - such as alternative retort process, waste water treatment, shale preparation; or partial implementation), place alternatives (alternative water and electrical power source and right-of-way routes), and time alternatives (phased development, delayed implementation, or partial implementation). Land exchange or block up alternatives and minor on-site alternatives, such as mining variations or structure locations, will not be considered. A tentative set of alternatives that will be considered for each project is included in Table 3.

Areal Extent and Location of Study Area

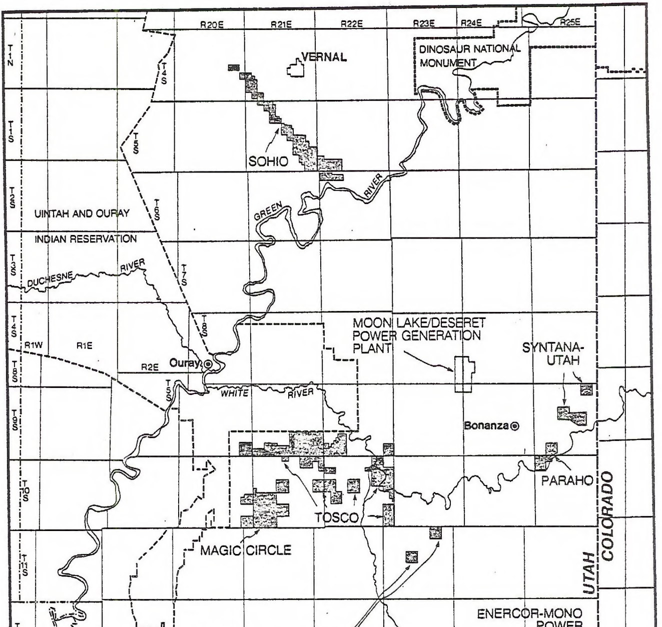
All seven projects to be considered in the Uintah Basin Synfuels Development EIS are located in the Uintah Basin region of northeast Utah (Map 1). The project study area will include that part of Uintah County (Utah) lying south of the northern boundary of Township 4 South; the northeast part of Grand County (Utah) lying within Range 22, 23, 24, 25, and 26 East, extending from the northern county boundary south to the southern boundary of Township 21 South and including the area within Range 21 East, Township 16 South, and Township 15 1/2 South and excluding that part of the Uintah and Ouray Indian Reservation located on the west side; and the northwest part of Mesa County (Colorado) consisting of the area bounded on the west by the Colorado-Utah State line, on the east by the north-south line bisecting the town of Loma (Colorado Highway 139), bounded on the north by the Mesa County line and on the south by the south boundary line of Township 11 South.

TABLE 3
ALTERNATIVES TO THE SITE-SPECIFIC PROPOSED ACTIONS

	Enercor-Mono Power (Rainbow)	Magic Circle	Paraho	Syntana-Utah	Tosco
Component Alternatives					
Water Source		X		X	X
Power Source					
Product Line R-O-W		X	X		X
Access Road R-O-W					
Transmission Line R-O-W					X
Other			X[b]		
Process Alternatives					
Retort		X			
Upgrading		X			X
Wastewater Treatment					
Other		X[a]			
No-Action Alternative	X	X	X	X	X

[a] Room and pillar mining followed by vertical modified in situ processing.

[b] Off-site construction camp and extended construction schedule alternatives.



MAP 1 LOCATIONS OF THE PROPOSED UINTAH BASIN SYNFUELS PROJECTS

The projects are primarily located on State land; rights-of-way across Federal land are required by all projects for access to their State lease land and/or for ancillary facilities such as transmission lines and underground pipelines. The total amount of Federal land involved is unknown at this time but will be provided in the EIS.

The affected environment area will vary with different resources, depending on the extent of impacts that can be directly related to the proposed actions. This impact area could include, but would not be limited to, parts of Duchesne, Uintah, and Grand counties (Utah) and Rio Blanco and Mesa counties (Colorado).

Site-Specific Analyses

A site-specific impact analysis will be conducted for each of the five site-specific projects (Enercor-Mono Power - Rainbow , Magic Circle, Paraho, Syntana-Utah, and Tosco). The site-specific analyses will assess impacts due to construction, operation and maintenance, and abandonment. The project components to be considered include, but may not be limited to, the mine, material handling facilities, ore preparation facilities, ore processing and upgrading facilities, spent ore disposal sites (reclamation), product transportation systems, and ancillary facilities such as water supply systems, access roads, transmission lines, and communication systems. Operation impacts will be assessed, beginning with the mining of the oil shale or tar sand ore to the delivery of the synthetic fuel products to the designated market(s), refineries, or pipelines insofar as such markets are known.

Impacts due to each project will be analyzed at two points in time, peak construction and peak operation, as determined by work force requirements. The impact analysis will consider only the impact of the proposed action and alternatives on the existing environment (current baseline).

The cumulative impacts for the site-specific projects will consider only the impacts of a proposal plus other projects that interact with a proposal. These other projects will not include any of the other six applicant-proposed synthetic fuel projects. Where appropriate (interaction occurs), the site-specific cumulative analyses will include the White River Shale Project.

Regional Analysis

The regional part of the EIS will be presented as two production-level scenarios (low and high). They will be analyzed at two points in time, peak construction and peak operation. There will be two parts to the impact analysis at each of these points. The parts will be as follows:

1. Impact of all the applicants that are part of the scenario.

2. Impact of the applicants plus all other interrelated projects. The White River Shale Project, for the purposes of the regional analysis, will be placed in the "other project" category.

The low-level production scenario assumes a break-even level (less than full production) that could be sustained over a period of time. Most of the companies indicated a low-level production was not realistic and expressed their need to move to the full production capacity. The applicants furnished production estimates (with individual qualifications and assumptions) resulting in a combined total of 121,000 bpd.

The high-level scenario will assume that all seven proposed projects will be developed to their full production levels during the analysis period and reach this peak at 1990. It will consider the cumulative effects of these projects and other projects (the White River Shale Project and others, see Appendix A, that are existing or planned for the Uintah Basin area. The total basin-wide production level (seven proposed projects) for this scenario will be approximately 320,500 bpd.

Problem Areas

Problems are anticipated in six areas, all related to the extremely short EIS schedule. These areas are: project description data and technical reports, development of viable management alternatives for the various rights-of-way, socioeconomic analysis, air quality analysis, loss of personnel, limited field season for on-the-ground review of pipeline routes, and assumptions made to develop this schedule.

CONSULTATION AND COORDINATION NEEDS

At various stages in the EIS process, the EIS preparers will need to work closely with a variety of Federal, State, and local agencies, the public, and the applicants.

Steering Committee Participation

The Uintah Basin Synfuels Development Steering Committee, composed of Federal, State, and local government agencies (Fig. 1), was formed to act as a forum for ideas and concerns of its members and to provide guidance to the BLM Utah State Director. It will play an advisory role in the EIS process, especially to ensure that State and local concerns are adequately addressed in the EIS. The committee will provide for interagency coordination and assist in identifying issues, sharing sources of data, and in some instances, collecting data for the EIS effort. To facilitate coordination throughout the EIS process, the steering committee will be informed on issues and discussions as BLM interacts with applicants and other agencies. The steering committee will review the preliminary draft and preliminary final EIS's and provide BLM with comments for consideration in preparing the draft and final EIS's.

Agency and Public Participation

The agencies that need to be consulted to obtain various reviews and approvals prior to implementation of the projects are listed in Table 4. As noted on the table, many of these agencies are members of the Uintah Basin Synfuels Steering Committee. Six agencies have provided a written intent also to participate as "cooperating agencies" under the terms of Council on Environmental Quality (CEQ) regulations. These are the Environmental Protection Agency, Bureau of Reclamation, U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs.

FIGURE 1

UINTAH BASIN SYNFUELS DEVELOPMENT STEERING COMMITTEE

Federal Government

Jim Butler
Regional Energy Development Officer
USDA - Forest Service
324 25th Street
Ogden, UT 84401
586-3332 or 3264

Robert D. Jacobson
Assistant Area Manager, Environment
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Environmental Protection Agency
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Denver, CO 80295
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National Park Service
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Lloyd Ferguson
BLM Vernal District Manager
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Vernal, UT 84078
789-1362

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State of Utah

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Salt Lake City, UT 84111
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Local Government

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Uintah County Commission
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Vernal, UT 84078
789-1622

Jim Reidhead
Duchesne County Commission
Drawer 270
Duchesne, UT 84021
738-2437

FIGURE 1 (concluded)

UINTAH BASIN SYNFUELS DEVELOPMENT STEERING COMMITTEE

Federal Government

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Bureau of Indian Affairs
Uintah and Ouray Agency
Fort Duchesne, UT 84026
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Eileen Banish
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Salt Lake City, UT 84104
588-4570

Ute Indian Tribe

Jason Cuch
Director of Resources
Ute Indian Tribe
Fort Duchesne, UT 84026
722-5141

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*Co-chairman of the committee

TABLE 4
AGENCIES NEEDED FOR CONSULTATION AND COORDINATION

Agency	Land or Law Jurisdiction	Expertise
Federal		
Advisory Council on Historic Preservation		X
*Bureau of Indian Affairs		X
Department of Energy		X
*Environmental Protection Agency	X[1]	X
Federal Energy Regulatory Commission		X X
*National Park Service		X
Office of Surface Mining		X
Soil Conservation Service		X
U.S. Department of the Army Corps of Engineers	X[2]	X
*U.S. Fish and Wildlife Service		X
*U.S. Forest Service	X	X
U.S. Geological Survey		X
State of Utah		
*Governor's Office		X
*Dept. of Community and Economic Development		X
*Dept. of Natural Resources and Energy	X	X
*Dept. of Health	X[1]	X
Local Government		
*Duchesne County Commission	X[3]	X
*Uintah County Commission	X[3]	X
*Grand County Commission	X[3]	X
Rio Blanco County Commission (Colorado)		X[4]
*Ute Indian Tribe	X	X

* Indicates agency is a member of the Uintah Basin Synfuels Development Steering Committee

[1] Coordination between PSD permit process/Clean Air Act compliance and the EIS process, plus other environmental health aspects.

[2] Approval and issuance of permits to cross navigable streams, if any

[3] Local ordinances

[4] Has interest due to potential impacts

Public participation in the EIS process will be facilitated through activities such as media releases and public hearings as outlined in the Public Participation Plan (Appendix D).

Applicant Participation

The applicants will provide BLM with a complete project description (including alternatives) for review and approval, in accordance with a checklist and outline supplied by BLM. The complete description will be submitted (in the form of a technical report for site-specific applicants) prior to the start of the EIS schedule.

The applicants will provide BLM with any technical or environmental information they have that would be useful in preparing the EIS. BLM will avoid duplication of effort wherever possible by using as much independently verifiable applicant data as possible in developing the EIS analysis (when these data have been furnished in a timely manner).

The applicants will supply copies of the project description technical reports suitable for distribution to the public. BLM will use the technical reports as the basis for developing the project descriptions to be included in the EIS. Each applicant will be provided the opportunity to review its project description prior to the publication of the EIS to ensure the project has been described correctly.

The applicants will respond to data requests within the timeframe set by BLM, as coordinated with the applicants, and provide review comments on the description of the proposed action and mitigation measures within the timeframe set by BLM. Failure to supply data within the agreed upon timeframe could result in the slippage of the overall schedule.

Applicants are welcome to attend steering committee meetings. Also, the BLM EIS team leader and key EIS team members will be in close contact with applicant representatives and their consultants on specific technical matters. In addition, BLM will arrange meetings to discuss problems or options which need joint BLM-applicant action.

MANAGEMENT OF THE EIS PROCESS

Management of the EIS process will involve four entities - the Uintah Basin Synfuels Development Steering Committee, BLM Utah State Office, BLM Vernal and Moab District Offices, and BLM Environmental Impact Statement Office. Each plays a unique role in the EIS process; that of the steering committee was discussed in the previous section.

BLM Utah State Office Responsibilities

The BLM Utah State Director has management lead and overall responsibility for the project and will approve the EIS.

The State Office, through the Project Management Staff (Project Manager, Thom Slater), will ensure the steering committee is informed of important issues and information that arise through BLM interactions with project applicants and governmental agencies. It will assist the BLM Environmental Impact Statement Office in data collection, analysis, and review throughout the EIS process. The State Office will be responsible for filing the draft and final EIS's and will receive comment letters on the EIS. Through the Public Affairs Office, the State Office will issue Federal Register notices and media releases and will coordinate arrangements for public meetings and other types of public involvement included in the public participation plan.

BLM Vernal and Moab District Office Responsibilities

The Vernal and/or Moab District Managers (or the Utah State Director) will make the final decisions on the rights-of-way applications. The Vernal District Office will assist the BLM EIS Office in data collection, analysis, and review throughout the EIS process and will participate in meetings with the public and local agencies as required.

BLM Environmental Impact Statement Office Responsibilities

The BLM Environmental Impact Statement Office (formerly Office of Special Projects) is responsible for preparing the EIS. This office's technical team (Table 5) will work closely with the BLM Utah State Office and BLM Vernal District Office during both the data collection and analysis phases of the EIS process. The EIS Office will coordinate reviews of draft versions of the EIS and its supporting technical reports, will prepare camera-ready copy of all EIS material, except project description technical reports, and will arrange for its printing and distribution.

The first EIS document that will be prepared for internal review will be called a preliminary draft EIS. To maintain maximum objectivity and a timely review, it will only be available for review to BLM, cooperating agencies, other Federal agencies who have requested a review role, and the steering committee. This document will be a first-cut effort to pull together all the impact analyses and will include many handwritten corrections. Applicants will have a chance to review their project descriptions chapter during PDEIS preparation.

TABLE 5
UINTAH BASIN SYNFUELS DEVELOPMENT EIS TEAM

Name/Title*	Responsibility
Jack Edwards, Project Leader	Project Leader; Overall Coordination and Review, Quality Control
Bob Pizel, Project Leader	Project Leader; Technical Coordination, Quality Control
Lois Cocker, Environmental Specialist	Coordination, Review, and Editing
Linda Branch, Editor	Coordination, Review, and Editing
Pam Sixta, Secretary	Project Secretary
Richard Traylor, Environmental Coordinator	Environmental Coordinator; Regulation Compliance, Quality Review
Alan Amen, Soil Scientist	Soils, Agriculture, Revegetation, Technical Team Map Requirements
Ray Boyd, Wildlife Biologist	Technical Team Leader; Wildlife, Threatened and Endangered Species
Gerald Brandvold, Botantist	Vegetation, Threatened and Endangered Species, Grazing, Ranching
Larcie Burnett, Archaeologist	Cultural Resources
Byron Shark, Engineer	Project and Alternative Descriptions
Don Hook, Environmental Engineer (Utah State Office)	Energy and Efficiency
Don Clark, Community Planner	Conflicts with Existing and Proposed Land Use Plans, Native American Issues, Transportation Systems
George E. Detsis, Environmental Protection Specialist	Authorizing Actions, Interrelated Projects, Recreation Resources, Wilderness
Gary Konwinski, Geologist	Surface Water Resources, Geology, Mineral Resources, Paleontology
Will Palmquist, Hydrologist	Ground Water Resources

TABLE 5 (Concluded)
UINTAH BASIN SYNFUELS DEVELOPMENT EIS TEAM

Name/Title*	Responsibility
Art Ruth, Economist	Socioeconomics (COAR[a] and lead)
Stan Specht, Landscape Architect	Visual Resources
Bill Wagner, Air Quality Specialist (Utah State Office)	Air Quality (COAR[b] and lead)
Mark Green, Air Quality Specialist (Utah State Office)	Air Quality
Paul Meyers, Sociologist, (Denver Service Center)	Sociology (Quality of Life, Attitudes and Values)
Pete Van Wyhe, Supervisory Printing Specialist	Production and Graphics Coordination
Troy Bunch, Illustrator	Cover, Technical Illustrations and Graphics
Keith Francis, Lead Cartographer	Cartographics and Graphics
Connie Hackathorn, Cartographer	Cartographics and Graphics
Jeanine Ayers, Word Processor	Text Production

* All team members from DSC - EIS Office unless otherwise noted.

[a] Administers socioeconomic contract with State of Utah.
[b] Administers air quality contract with SAI.

EIS Schedule

The following assumptions related to the schedule were made:

1. The draft and final EIS's will not be photocomposed, decreasing production time but increasing the page count and printing costs.
2. The preliminary draft EIS review will be conducted at the EIS Office in order to reduce time required for the review.
3. The review of the preliminary final EIS will proceed concurrently with its preparation. No formal review of the preliminary final EIS will occur.
4. All approval-to-print reviews will be conducted at the EIS Office so that final text changes can be made concurrently with the review.
5. Comment-letters on the draft EIS will be forwarded to the EIS Office as they are received. No letters received later than five-days after the close of the public comment period will be addressed in the final EIS.

UBS EIS SCHEDULE

Work Item	Date
First Draft of Applicants' Project Description Technical Reports Due to BLM	9/30/81
Adequate Applicants' Project Description Technical Reports due to BLM	11/1/81
Preliminary Draft Socioeconomic Technical Report Due to BLM	3/12/82
Preliminary Draft Air Quality Technical Report Due to BLM	3/12/82
Preliminary Draft EIS Complete	4/9/82
Review of Preliminary Draft EIS and Technical Reports	4/12-4/23/82
Draft Air Quality Technical Report Due	6/4/82
Draft Socioeconomic Technical Report Due	6/14/82
Review of Draft EIS (S.D. approval to print)	7/12-7/16/82

Work Item	Date
Printing of Draft EIS	7/19-8/6/82
Filing of Draft EIS with EPA	8/5/82
Draft EIS Distribution/Notice in Federal Register	8/13/82
Draft EIS Public Review Period	8/13-10/12/82
Public Hearings	9/13-9/17/82
Preliminary Final Air Quality and Socioeconomic Technical Reports	11/10/82
Final Air Quality Technical Report	12/6/82
Final EIS Complete	12/10/82
Review of Final EIS (S.D. approval to print)	12/13-12/17/82
Final Socioeconomic Technical Report	12/20/82
Printing of Final EIS	12/20-1/7/83
Filing of Final EIS with EPA	1/6/83
Distribution of Final EIS/Notice in Federal Register	1/14/83

APPENDIX A. RELATED PROJECTS

COLORADO

- Deserado Coal Company
- Dorchester Coal Company (Fruita Mines 1 and 2)
- Gary Energy Corporation Oil Refinery
- Mack, Colorado, Ute Power Project (Southwest Unit 1 and 2)
- Sheridan Enterprises
- Taylor Draw Reservoir Project

UTAH

- Baker Associates, Incorporated
- C & A Companies
- Central Utah Project
- Chevron Resources Company - Vernal Phosphate Rock Operation
- Moon Lake Power Plant Project (Units 1 and 2)
- Plateau Refinery
- Ramex
- Western Tar Sands, Incorporated
- White River Dam Project
- White River Shale Project

UTAH/COLORADO

- Gary Energy Corporation

APPENDIX B EIS OUTLINES

The two EIS outlines that follow are considered to be working documents. As work progresses they will be expanded and revised to meet the needs of the analysis work. The scope of work anticipated for various EIS sections is delineated to the right of the first outline. The second outline is more detailed and contains each project with its alternatives.

Seven technical reports (socioeconomics, air quality, and five project descriptions), will be published. All other material gathered or prepared in support of the EIS will be maintained as file material.

UINTAH BASIN SYNFUELS DEVELOPMENT EIS

Outline	Scope of Section
Cover Letter	Information about public comment period.
Title Page	Title, preparer, date, Utah State Director signature.
Cover Sheet	Lead agency, cooperating agencies, counties that would be affected, abstract, EIS contact, comment period.
Contents	Including lists of tables, figures, and maps.
Public Hearings Information	Hearing locations and dates, authority, purpose, composition of hearing panel, hearing procedures.
Preface	
EIS Summary	
Introduction	Brief descriptions of proposed actions and alternatives.
EIS Organization	Explanation of tiered approach encompassing site-specific and regional analyses.
Areas of Controversy	Issues identified during scoping and during analysis process.
Major Impact Conclusions	
Issues to be Resolved	Issues to be resolved by the BLM decision maker.
Agency-Preferred Alternative	
REGIONAL OVERVIEW	
Chapter 1R: Regional Development Scenarios	
Introduction	Brief explanation of parameters and assumptions; tables showing pertinent project descriptive data (for proposed projects and other planned projects as defined by the assumptions) - production levels, plant emissions, worker influx and secondary population increase, water and power requirements. List of other projects considered in the cumulative analysis. Explanation of general mining and processing techniques to be used.
High-level Scenario	
Low-level Scenario	
Interrelationships Section	
Authorizing Actions	
General Description	
Chapter 2R: Comparative Analysis of Scenarios	Comparison of each scenario's impacts to socioeconomics, air quality, water resources, fish and wildlife, and other pertinent aspects of the environment; tables used to show differences among scenarios wherever possible.
Chapter 3R: Affected Environment	Concise descriptions of key environmental resources that would be affected by cumulative impacts under the two scenarios. Tables used to show differences among scenarios as needed. This chapter will provide the base for the site-specific affected environment chapters.
Socioeconomics	
Air Quality	
Water Resources	
Wildlife	
(other resources to be added as warranted by the impact analysis)	Other resources/areas to be investigated for possible inclusion are vegetation (including reclamation and soils), land use (including transportation, grazing, agriculture, recreation, wilderness, and conflicts with existing land use plans), cultural resources, visual resources, geology (including paleontology and mineral resources), and Native American concerns.

Chapter 4R: Environmental Consequences	
Introduction	Identification of resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. It is possible that some of the sections listed below will not appear in the EIS if no significant impacts are predicted by the analysis of that particular resource. This chapter will provide the base for the site-specific environmental consequences chapters. Will not address mitigation or monitoring of regional impacts.
High-level Scenario	
Socioeconomics	Modeling and development of socioeconomic analysis will be closely coordinated with the State of Utah and the affected counties. Areas to be considered include labor, housing, schools, social services, and justice system. Native Americans will also be considered.
Air Quality	Modeling and development of air quality analysis will be closely coordinated with the Environmental Protection Agency and the states of Utah and Colorado. Close attention will be paid to potential effects on Dinosaur National Monument. Will identify emissions and visibility impacts on a region basis.
Water Resources	Will rely primarily on existing Federal and State studies of regional surface-water and ground-water conditions. Major emphasis will be on use and availability of surface water. Will not be possible to resolve the question of how much water is available for synfuel development or other new industry; however, several points of view will be presented. Will not discuss legal implications of water use. Degradation of surface-water quality will be addressed, but not anticipated to be a significant impact. Anticipate only brief discussion of ground-water impacts, because few, if any, regional impacts are anticipated.
Wildlife	Will address impacts to threatened and endangered species and species of concern identified by the Utah Division of Wildlife Resources. Will also address potential significant cumulative effects of stream flow reductions on the Green and White rivers and surrounding habitat, and effects of human population increase on crucial and critical habitat in the Book Cliffs, Green River, White River, and other areas. Mitigation will be addressed.
Vegetation and Reclamation	Will consider anticipated reclamation success and address impacts to soils, the endangered Uintah Basin hookless cactus, and broad vegetation types. Will consider vegetation loss due to project construction, operation, and population increase.
Transportation Networks	Will focus on cumulative impacts to existing transportation facilities, including roads, rail lines, pipelines, and transmission lines.
Grazing	Will focus on cumulative effects of interruption of grazing patterns by regional development.
Agriculture	Will focus on secondary cumulative impacts in the Vernal area (Ashley Valley) and possibly the Pelican Lake area due to conversion from irrigated cropland to urban area.
Recreation	Will focus on cumulative impacts on disperse use of recreation areas. The urban facility impact analysis will be general; the number of new facilities needed will not be quantified.

Wilderness	Do not anticipate significant regional impacts, so this may not appear as a separate heading in this part of the EIS.
Conflicts with Existing Land Use Plans	Do not anticipate significant regional impacts, so this may not appear as a separate heading in this part of the EIS.
Cultural Resources	Will explain compliance with 36 CFR 800 and other pertinent legislation. Will focus on direct and indirect cumulative impacts. Will discuss highly sensitive areas.
Visual Resources	Will focus on changes in the overall character of the area due to cumulative regional impacts.
Geology	Will focus on effect of synfuel development on oil and gas production, gilsonite recovery, and recovery of other minerals in the area. Will quantify losses or interruptions to recovery where possible. Will also consider impacts on the paleontological resource.
Ruptures and Spills	
Native American Concerns	Will address significant regional impacts to Native Americans under the appropriate resource heading such as socioeconomics, water resources, and cultural resources.
Low-level Scenario	See high-level scenario
Chapter 5R: Response to Comments on the Draft EIS	Will be included in the Final EIS only.
SITE-SPECIFIC ANALYSES	
Chapter 1E: Enercor-Mono Power - Rainbow Project	
Description of Proposed Action and Alternatives	
Introduction	
Need for Project	
Purpose of the Project	
Proposed Action	
General Description	
Project Components	Components will be described and construction techniques explained.
Mine	Will include discussion of any project components, such as crushers, located in the mine and conveyors to the ore processors.
Ore and Product Processors	
Product Transportation	
Spent Ore Disposal and Reclamation	
Ancillary Facilities	Will include discussion of water and power supply systems, wastewater treatment, communications system, and any other facilities that do not fall under one of the other categories.
Solid and Hazardous Wastes	
Operation, Maintenance, and Abandonment	
Authorizing Actions	
(Component Alternatives) (Process Alternatives)	Alternatives will be discussed individually, using same outline as shown for the proposed action whenever applicable.
No-Action Alternative	
Alternatives Considered but Eliminated from Detailed Analysis	
Comparison of Proposed Action and Alternatives	Information presented in tables wherever possible.
Chapter 2E: Enercor-Mono Power Rainbow - Comparative Analysis of Proposed Action and Alternatives	Information presented in tables wherever possible. Should include data similar to that included in Chapter 2R. Will summarize all impact data for the project, even though Chapter 4E, only covers impacts unique to the site and will reference the regional comparative analysis chapter. Will also include energy efficiency analysis.

Chapter 3E: Enercor-Mono Power Rainbow - Affected Environment	Will include only unique site-specific data not included in Chapter 3R. Will be mainly tables of facts and figures with references to Chapter 3R.
Proposed Action Socioeconomics Air Quality Water Resources Wildlife (other resources to be added as warranted by the impact analysis)	
Alternative Alternative	Will discuss aspects of the environment that would be significantly affected by the alternative. Wherever possible, previous discussions for the proposed action or regional analysis will be referenced. Thus, it is anticipated that not all resources will be discussed in a separate section for each alternative.
Chapter 4E: Enercor-Mono Power Rainbow Environmental Consequences, Mitigation and Monitoring	Will include impacts caused solely by the Enercor-Mono Power project. Significant impacts are discussed in detail; insignificant impacts are discussed more generally.
Introduction	Will identify resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. Thus, it is possible that not all the resource sections listed below will actually appear in the EIS.
Environmental Consequences Proposed Action	
Socioeconomics	Will focus on impacts from the influx of Enercor-Mono Power construction and operation workers on the communities in the Uintah Basin area, including western Colorado as appropriate. Will address impacts of new town proposals.
Air Quality	Will focus on site-specific impacts of the proposed action.
Water Resources	Will focus on the impacts of water use. Will address effects of project construction and operation on water quality, including effects of erosion, sedimentation, spent shale leachate, and stream flow reduction. Will assess potential oil spill impacts.
Wildlife	Will focus on potential effects on endangered species. Will also address potential effects of stream flow reductions and water quality changes on the project water sources and surrounding habitat, and effects of project-related human population growth on crucial and critical habitat. Will assess potential oil spill impacts.
Vegetation and Reclamation	Will focus on reclamation success for soils and broad vegetation types disturbed by the project and on potential effects to the endangered Uintah Basin hookless cactus.
Transportation Networks	Anticipate few significant project-related impacts. Will focus on impacts due to transportation to and from the project site.
Grazing	Will focus on effects of interruption of grazing patterns by project facilities.
Agriculture	Will focus on effects of project facilities on agriculture.

Conflicts with Existing Land Use Plans	Will focus on impacts of the project on city, county, and multicounty land use plans.
Cultural Resources	Will focus on project-related impacts to known sensitive areas and significant sites.
Visual Resources	Will focus on site-specific changes in the visual character of the area due to project construction and operation. (Air quality visibility impacts will be included in the air quality section.)
Geology	No significant project-related impacts to paleontological or mineral resources anticipated, so probably will not require a separate section.
(Native American Concerns)	Significant project-related impacts to Native Americans will be addressed under the appropriate resource heading.
Alternative-Alternative	Will reference proposed action impact discussions wherever possible. Only impacts unique to a particular alternative will be discussed here (under the appropriate resource heading).
Mitigation and Monitoring	Will identify mitigation measures and monitoring programs that are not included in the proposed action or would not be standard measures that would be part of an authorizing action. All items included would either be enforceable by a governmental agency or committed to in writing by the applicant.
Chapter 5E: Enercor-Mono Power Rainbow - Impacts, Benefits, Trade-offs, and Commitment of Resources	
Cumulative Impacts Socioeconomics (other resources as warranted by the impact analysis)	Will identify significant cumulative impacts of Enercor-Mono Power project only plus other planned projects affecting the same local area during the same time period (but not including any of the other six synfuel projects covered by this EIS). Introduction will identify the other projects considered in the cumulative analysis.
Trends Having a Significant Impact on Environmental Values	
Benefits and Trade-offs	
Commitment of Resources	
Chapter 1M: Magic Circle Cottonwood Wash Project Description of Proposed Action and Alternatives	
Introduction	
Need for Project	
Purpose of the Project	
Proposed Action	
General Description	
Project Components	Components will be described and construction techniques explained.
Mine	Will include discussion of any project components, such as crushers, located in the mine and conveyors to the ore processors.
Ore and Product Processors	
Product Transportation	
Spent Ore Disposal and Reclamation	
Ancillary Facilities	Will include discussion of water and power supply systems, wastewater treatment, communications system, and any other facilities that do not fall under one of the other categories.

Solid and Hazardous Wastes	
Operation, Maintenance, and Abandonment	
Authorizing Actions	
(Component Alternatives) (Process Alternatives)	Alternatives will be discussed individually, using same outline as shown for the proposed action whenever applicable.
No-Action Alternative	
Alternatives Considered but Eliminated from Detailed Analysis	
Comparison of Proposed Action and Alternatives	Information presented in tables wherever possible.
Chapter 2M: Magic Circle Cottonwood-Wash Project - Comparative Analysis of Proposed Action and Alternatives	Information presented in tables wherever possible. Should include data similar to that included in Chapter 2R. Will summarize all impact data for the project, even though Chapter 4M, only covers impacts unique to the site and will reference the regional comparative analysis chapter. Will also include energy efficiency analysis.
Chapter 3M: Magic Circle Cottonwood-Wash Project - Affected Environment	Will include only unique site-specific data not included in Chapter 3R. Will be mainly tables of facts and figures with references to Chapter 3R.
Proposed Action	
Socioeconomics	
Air Quality	
Water Resources	
Wildlife	
(other resources to be added as warranted by the impact analysis)	
Alternative Alternative	Will discuss aspects of the environment that would be significantly affected by the alternative. Wherever possible, previous discussions for the proposed action or regional analysis will be referenced. Thus, it is anticipated that not all resources will be discussed in a separate section for each alternative.
Chapter 4M: Magic Circle Cottonwood-Wash Project - Environmental Consequences, Mitigation and Monitoring	Will include impacts caused solely by the Magic Circle project. Significant impacts are discussed in detail; insignificant impacts are discussed more generally.
Introduction	Will identify resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. Thus, it is possible that not all the resource sections listed below will actually appear in the EIS.
Environmental Consequences	
Proposed Action	
Socioeconomics	Will focus on impacts from the influx of Magic Circle construction and operation workers on the communities in the Uintah Basin area, including western Colorado as appropriate. Will address impacts of new town proposals.
Air Quality	Will focus on site-specific impacts of the proposed action.
Water Resources	Will focus on the impacts of water use. Will address effects of project construction and operation on water quality, including effects of erosion, sedimentation, spent shale leachate, and stream flow reduction. Will assess potential oil spill impacts.

Wildlife	Will focus on potential effects on endangered species. Will also address potential effects of stream flow reductions and water quality changes on the project water sources and surrounding habitat, and effects of project-related human population growth on crucial and critical habitat. Will assess potential oil spill impacts.
Vegetation and Reclamation	Will focus on reclamation success for soils and broad vegetation types disturbed by the project and on potential effects to the endangered Uintah Basin hookless cactus.
Transportation Networks	Anticipate few significant project-related impacts. Will focus on impacts due to transportation to and from the project site.
Grazing	Will focus on effects of interruption of grazing patterns by project facilities.
Agriculture	Will focus on effects of project facilities on agriculture.
Conflicts with Existing Land Use Plans	Will focus on impacts of the project on city, county, and multicounty land use plans.
Cultural Resources	Will focus on project-related impacts to known sensitive areas and significant sites.
Visual Resources	Will focus on site-specific changes in the visual character of the area due to project construction and operation. (Air quality visibility impacts will be included in the air quality section.)
Geology	No significant project-related impacts to paleontological or mineral resources anticipated, so probably will not require a separate section.
(Native American Concerns)	Significant project-related impacts to Native Americans will be addressed under the appropriate resource heading.
Alternative- Alternative	Will reference proposed action impact discussions wherever possible. Only impacts unique to a particular alternative will be discussed here (under the appropriate resource heading).
Mitigation and Monitoring	Will identify mitigation measures and monitoring programs that are not included in the proposed action or would not be standard measures that would be part of an authorizing action. All items included would either be enforceable by a governmental agency or committed to in writing by the applicant.

Chapter 5M: Magic Circle Cottonwood Wash Project
- Impacts, Benefits, Trade-offs,
and Commitment of Resources

Cumulative Impacts Socioeconomics (other resources as warranted by the impact analysis)	Will identify significant cumulative impacts of Magic Circle project only plus other planned projects affecting the same local area during the same time period (but not including any of the other six synfuel projects covered by this EIS). Introduction will identify the other projects considered in the cumulative analysis.
Trends Having a Significant Impact on Environmental Values	

- Benefits and Trade-offs
- Commitment of Resources

Chapter 1P: Paraho - Ute Project
Description of Proposed Action and Alternatives

- Introduction
- Need for Project
- Purpose of the Project
- Proposed Action
  - General Description
  - Project Components - - - - Components will be described and construction techniques explained.
    - Mine - - - - Will include discussion of any project components, such as crushers, located in the mine and conveyors to the ore processors.
    - Ore and Product Processors
    - Product Transportation
    - Spent Ore Disposal and Reclamation
    - Ancillary Facilities - - - - Will include discussion of water and power supply systems, wastewater treatment, communications system, and any other facilities that do not fall under one of the other categories.
      - Solid and Hazardous Wastes
  - Operation, Maintenance, and Abandonment
  - Authorizing Actions
- (Component Alternatives) - - - - Alternatives will be discussed individually, using same outline as shown for the proposed action whenever applicable.
- (Process Alternatives)
- No-Action Alternative
- Alternatives Considered but Eliminated from Detailed Analysis
- Comparison of Proposed Action and Alternatives   Information presented in tables wherever possible.

Chapter 2P: Paraho - Ute Project - Comparative Analysis of Proposed Action and Alternatives - - - - Information presented in tables wherever possible. Should include data similar to that included in Chapter 2R. Will summarize all impact data for the project, even though Chapter 4P, only covers impacts unique to the site and will reference the regional comparative analysis chapter. Will also include energy efficiency analysis.

Chapter 3P: Paraho - Ute Project - Affected Environment - - - - Will include only unique site-specific data not included in Chapter 3R. Will be mainly tables of facts and figures with references to Chapter 3R.

- Proposed Action
  - Socioeconomics
  - Air Quality
  - Water Resources
  - Wildlife
  - (other resources to be added as warranted by the impact analysis)
- Alternative - - - - Will discuss aspects of the environment that would be significantly affected by the alternative. Wherever possible, previous discussions for the proposed action or regional analysis will be referenced. Thus, it is anticipated that not all resources will be discussed in a separate section for each alternative.
- Alternative

Chapter 4P: Paraho - Ute Project - Environmental Consequences, Mitigation and Monitoring	Will include impacts caused solely by the Paraho - Ute project. Significant impacts are discussed in detail; insignificant impacts are discussed more generally.
Introduction	Will identify resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. Thus, it is possible that not all the resource sections listed below will actually appear in the EIS.
Environmental Consequences	
Proposed Action	
Socioeconomics	Will focus on impacts from the influx of Paraho - Ute construction and operation workers on the communities in the Uintah Basin area, including western Colorado as appropriate. Will address impacts of new town proposals.
Air Quality	Will focus on site-specific impacts of the proposed action.
Water Resources	Will focus on the impacts of water use. Will address effects of project construction and operation on water quality, including effects of erosion, sedimentation, spent shale leachate, and stream flow reduction. Will assess potential oil spill impacts.
Wildlife	Will focus on potential effects on endangered species. Will also address potential effects of stream flow reductions and water quality changes on the project water sources and surrounding habitat, and effects of project-related human population growth on crucial and critical habitat. Will assess potential oil spill impacts.
Vegetation and Reclamation	Will focus on reclamation success for soils and broad vegetation types disturbed by the project and on potential effects to the endangered Uintah Basin hookless cactus.
Transportation Networks	Anticipate few significant project-related impacts. Will focus on impacts due to transportation to and from the project site.
Grazing	Will focus on effects of interruption of grazing patterns by project facilities.
Agriculture	Will focus on effects of project facilities on agriculture.
Conflicts with Existing Land Use Plans	Will focus on impacts of the project on city, county, and multicounty land use plans.
Cultural Resources	Will focus on project-related impacts to known sensitive areas and significant sites.
Visual Resources	Will focus on site-specific changes in the visual character of the area due to project construction and operation. (Air quality visibility impacts will be included in the air quality section.)
Geology	No significant project-related impacts to paleontological or mineral resources anticipated, so probably will not require a separate section.
(Native American Concerns)	Significant project-related impacts to Native Americans will be addressed under the appropriate resource heading.
Alternative- Alternative	Will reference proposed action impact discussions wherever possible. Only impacts unique to a particular alternative will be discussed here (under the appropriate resource heading).
Mitigation and Monitoring	Will identify mitigation measures and monitoring programs that are not included in the proposed action or would not be standard measures that would be part of an authorizing action. All items included would either be enforceable by a governmental agency or committed to in writing by the applicant.

Chapter 5P: Paraho - Ute Project
- Impacts, Benefits, Trade-offs,
and Commitment of Resources

Cumulative Impacts - - - - - - - - - - - - - - - - Will identify significant cumulative impacts of Paraho - Ute project only plus other planned projects affecting the same local area during the same time period (but not including any of the other six synfuel projects covered by this EIS). Introduction will identify the other projects considered in the cumulative analysis.

Socioeconomics
(other resources as warranted
by the impact analysis)

Trends Having a Significant Impact on
Environmental Values

Benefits and Trade-offs

Commitment of Resources

Chapter 1S: Syntana-Utah Project
Description of Proposed Action and Alternatives
Introduction
Need for Project
Purpose of the Project
Proposed Action
General Description
Project Components- - - - - - - - - - - - - - - - Components will be described and construction techniques explained.
Mine- Will include discussion of any project components, such as crushers, located in the mine and conveyors to the ore processors.

Ore and Product Processors
Product Transportation
Spent Ore Disposal and Reclamation
Ancillary Facilities- - - - - - - - - - - - - - Will include discussion of water and power supply systems, wastewater treatment, communications system, and any other facilities that do not fall under one of the other categories.

Solid and Hazardous Wastes
Operation, Maintenance, and Abandonment
Authorizing Actions
(Component Alternatives) - - - - - - - - - - - - - Alternatives will be discussed individually, using same outline as shown for the proposed action whenever applicable.
(Process Alternatives)
No-Action Alternative
Alternatives Considered but Eliminated from
Detailed Analysis
Comparison of Proposed Action and Alternatives   Information presented in tables wherever possible.

Chapter 2S: Syntana-Utah Project - - - - - - - - - - - Information presented in tables wherever possible. Should include data similar to that included in Chapter 2R. Will summarize all impact data for the project, even though Chapter 4S, only covers impacts unique to the site and will reference the regional comparative analysis chapter. Will also include energy efficiency analysis.
- Comparative Analysis of Proposed
Action and Alternatives

Chapter 3S: Syntana-Utah Project - Affected Environment	Will include only unique site-specific data not included in Chapter 3R. Will be mainly tables of facts and figures with references to Chapter 3R.
Proposed Action Socioeconomics Air Quality Water Resources Wildlife (other resources to be added as warranted by the impact analysis)	
Alternative Alternative	Will discuss aspects of the environment that would be significantly affected by the alternative. Wherever possible, previous discussions for the proposed action or regional analysis will be referenced. Thus, it is anticipated that not all resources will be discussed in a separate section for each alternative.
Chapter 4S: Syntana-Utah Project - Environmental Consequences, Mitigation and Monitoring	Will include impacts caused solely by the Syntana-Utah project. Significant impacts are discussed in detail; insignificant impacts are discussed more generally.
Introduction	Will identify resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. Thus, it is possible that not all the resource sections listed below will actually appear in the EIS.
Environmental Consequences Proposed Action Socioeconomics	Will focus on impacts from the influx of Syntana-Utah construction and operation workers on the communities in the Uintah Basin area, including western Colorado as appropriate. Will address impacts of new town proposals.
Air Quality	Will focus on site-specific impacts of the proposed action.
Water Resources	Will focus on the impacts of water use. Will address effects of project construction and operation on water quality, including effects of erosion, sedimentation, spent shale leachate, and stream flow reduction. Will assess potential oil spill impacts.

Wildlife	Will focus on potential effects on endangered species. Will also address potential effects of stream flow reductions and water quality changes on the project water sources and surrounding habitat, and effects of project-related human population growth on crucial and critical habitat. Will assess potential oil spill impacts.
Vegetation and Reclamation	Will focus on reclamation success for soils and broad vegetation types disturbed by the project and on potential effects to the endangered Uintah Basin hookless cactus.
Transportation Networks	Anticipate few significant project-related impacts. Will focus on impacts due to transportation to and from the project site.
Grazing	Will focus on effects of interruption of grazing patterns by project facilities.
Agriculture	Will focus on effects of project facilities on agriculture.
Conflicts with Existing Land Use Plans	Will focus on impacts of the project on city, county, and multicounty land use plans.
Cultural Resources	Will focus on project-related impacts to known sensitive areas and significant sites.
Visual Resources	Will focus on site-specific changes in the visual character of the area due to project construction and operation. (Air quality visibility impacts will be included in the air quality section.)
Geology	No significant project-related impacts to paleontological or mineral resources anticipated, so probably will not require a separate section.
(Native American Concerns)	Significant project-related impacts to Native Americans will be addressed under the appropriate resource heading.
Alternative-Alternative	Will reference proposed action impact discussions wherever possible. Only impacts unique to a particular alternative will be discussed here (under the appropriate resource heading).
Mitigation and Monitoring	Will identify mitigation measures and monitoring programs that are not included in the proposed action or would not be standard measures that would be part of an authorizing action. All items included would either be enforceable by a governmental agency or committed to in writing by the applicant.

Chapter 5S: Syntana-Utah Project - Impacts, Benefits, Trade-offs, and Commitment of Resources	
Cumulative Impacts	Will identify significant cumulative impacts of Syntana-Utah project only plus other planned projects affecting the same local area during the same time period (but not including any of the other six synfuel projects covered by this EIS). Introduction will identify the other projects considered in the cumulative analysis.
Socioeconomics (other resources as warranted by the impact analysis)	
Trends Having a Significant Impact on Environmental Values	
Benefits and Trade-offs	
Commitment of Resources	
Chapter 1T: Tosco Sand Wash Project Description of Proposed Action and Alternatives	
Introduction	
Need for Project	
Purpose of the Project	
Proposed Action	
General Description	
Project Components	Components will be described and construction techniques explained.
Mine	Will include discussion of any project components, such as crushers, located in the mine and conveyors to the ore processors.
Ore and Product Processors	
Product Transportation	
Spent Ore Disposal and Reclamation	
Ancillary Facilities	Will include discussion of water and power supply systems, wastewater treatment, communications system, and any other facilities that do not fall under one of the other categories.
Solid and Hazardous Wastes	
Operation, Maintenance, and Abandonment	
Authorizing Actions	
(Component Alternatives) (Process Alternatives)	Alternatives will be discussed individually, using same outline as shown for the proposed action whenever applicable.
No-Action Alternative	
Alternatives Considered but Eliminated from Detailed Analysis	
Comparison of Proposed Action and Alternatives	Information presented in tables wherever possible.
Chapter 2T: Tosco Sand Wash Project - Comparative Analysis of Proposed Action and Alternatives	Information presented in tables wherever possible. Should include data similar to that included in Chapter 2R. Will summarize all impact data for the project, even though Chapter 4T, only covers impacts unique to the site and will reference the regional comparative analysis chapter. Will also include energy efficiency analysis.

Chapter 3T: Tosco Sand Wash Project - Affected Environment	Will include only unique site-specific data not included in Chapter 3R. Will be mainly tables of facts and figures with references to Chapter 3R.
Proposed Action	
Socioeconomics	
Air Quality	
Water Resources	
Wildlife	
(other resources to be added as warranted by the impact analysis)	
Alternative	Will discuss aspects of the environment that would be significantly affected by the alternative. Wherever possible, previous discussions for the proposed action or regional analysis will be referenced. Thus, it is anticipated that not all resources will be discussed in a separate section for each alternative.
Alternative	
Chapter 4T: Tosco Sand Wash Project - Environmental Consequences, Mitigation and Monitoring	Will include impacts caused solely by the Tosco Sand Wash project. Significant impacts are discussed in detail; insignificant impacts are discussed more generally.
Introduction	Will identify resources determined to have no significant impacts and brief explanation why. Identification of criteria used to determine impact significance for each resource discussed in detail. Thus, it is possible that not all the resource sections listed below will actually appear in the EIS.
Environmental Consequences	
Proposed Action	
Socioeconomics	Will focus on impacts from the influx of Tosco Sand Wash construction and operation workers on the communities in the Uintah Basin area, including western Colorado as appropriate. Will address impacts of new town proposals.
Air Quality	Will focus on site-specific impacts of the proposed action.
Water Resources	Will focus on the impacts of water use. Will address effects of project construction and operation on water quality, including effects of erosion, sedimentation, spent shale leachate, and stream flow reduction. Will assess potential oil spill impacts.
Wildlife	Will focus on potential effects on endangered species. Will also address potential effects of stream flow reductions and water quality changes on the project water sources and surrounding habitat, and effects of project-related human population growth on crucial and critical habitat. Will assess potential oil spill impacts.
Vegetation and Reclamation	Will focus on reclamation success for soils and broad vegetation types disturbed by the project and on potential effects to the endangered Uintah Basin hookless cactus.
Transportation Networks	Anticipate few significant project-related impacts. Will focus on impacts due to transportation to and from the project site.

Grazing- Will focus on effects of interruption of grazing patterns by project facilities.

Agriculture- - - - - - - - - - - - - - - - - - - Will focus on effects of project facilities on agriculture.

Conflicts with Existing Land Use Plans - - - - - Will focus on impacts of the project on city, county, and multicounty land use plans.

Cultural Resources - - - - - - - - - - - - - - - Will focus on project-related impacts to known sensitive areas and significant sites.

Visual Resources - - - - - - - - - - - - - - - - Will focus on site-specific changes in the visual character of the area due to project construction and operation. (Air quality visibility impacts will be included in the air quality section.)

Geology- No significant project-related impacts to paleontological or mineral resources anticipated, so probably will not require a separate section.

(Native American Concerns) - - - - - - - - - - - Significant project-related impacts to Native Americans will be addressed under the appropriate resource heading.

Alternative- - - - - - - - - - - - - - - - - - - Will reference proposed action impact discussions wherever possible. Only impacts unique to a particular alternative will be discussed here (under the appropriate resource heading).
Alternative

Mitigation and Monitoring - - - - - - - - - - - - Will identify mitigation measures and monitoring programs that are not included in the proposed action or would not be standard measures that would be part of an authorizing action. All items included would either be enforceable by a governmental agency or committed to in writing by the applicant.

Chapter 5T: Tosco Sand Wash Project
- Impacts, Benefits, Trade-offs,
and Commitment of Resources

Cumulative Impacts - - - - - - - - - - - - - - - - Will identify significant cumulative impacts of Tosco Sand Wash project only plus other planned projects affecting the same local area during the same time period (but not including any of the other six synfuel projects covered by this EIS). Introduction will identify the other projects considered in the cumulative analysis.

Socioeconomics
(other resources as warranted
by the impact analysis)

Trends Having a Significant Impact on
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Benefits and Trade-offs

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E-1.G Alternatives Considered but Eliminated from Detailed Analysis

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(describe only the environment that is different from the proposed action - this pertains to all Chapter 3 Affected Environment alternatives).

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(Resources R-3.A through R-3.M, as needed)

M-3.B Small-scale Paraho Process Alternative
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M-3.C Douglas Creek Alternative Water Supply System
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M-3.D White River Dam Alternative Water Supply System
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Chapter M-4: Magic Circle Cottonwood Wash Project - Environmental Consequences, Mitigation and Monitoring

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(Resources R-3.A through R-3.M, as needed)

M-4.B Small-scale Paraho Process Alternative
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M-4.C Douglas Creek Alternative Water Supply System
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DESCRIPTIONS OF THE PROPOSED ACTIONS

Each of the seven projects to be considered in the EIS are described in this appendix. Each project summary includes the applicant's proposed project description (proposed action), BLM action required, end use of product, project life, construction schedule, and estimated work force requirements.

Enercor-Mono Power Company - Rainbow Development

Enercor - Mono Power Company plan to mine and retort tar sand in the southeastern section of Uintah County (Map 1). A demonstration module would be located at the Rainbow Mine.

Initially, a pilot plant and mine would be established. The demonstration module would produce 5,000 barrels per day (bpd).

The process of tar sand retorting would involve the use of hot water, which separates the petroleum from the sand. The resulting bituminous crude would then be upgraded to a synthetic crude by a conventional delay coking process. Spent water would be recycled and the coke (which is a by-product of the refining process) would be combusted for general in-plant heating and water heating purposes. The processed sand would be returned to the mine area.

BLM Action Required

BLM lands have been applied for rights-of-way for a three mile long haul road, transmission lines, and water lines. The requested width is for a one-half mile corridor and 100-foot final R-O-W.

End Use of Product

The synfuel produced by this project may be used directly or indirectly as fuel for South California Edison Company's electric generating plants in southern California.

Construction Schedule

Construction of the demonstration module would begin in 1983 and would be completed by 1985.

Estimated Work Force Requirements

A peak construction work force of 450 would be required.

Enercor-Mono Power Company - P.R. Springs Development

Enercor-Mono Power Company plans to mine and retort tar sand in the southeastern section of Uintah County (Map 1). The nine modules would be located at Cedar Camp Mine.

If the pilot plant at the Rainbow Mine proves successful, the nine modules at P.R. Springs would be constructed, each productng 5,000 bpd, for a total production of 50,000 bpd of synthetic crude oil.

The process of tar sand retorting would involve the use of hot water, which separates the petroleum from the sand. The resulting bituminous crude would then be upgraded to a synthetic crude by a conventional delay coking process. Spent water would be recycled and the coke (which is a by-product of the refining process) would be combusted for general in-plant heating and water heating purposes. The processed sand would be returned to the mine area.

BLM Action Required

Enercor-Mono Power will require the use of about 700 acres of public land managed by the BLM for the P.R. Springs process facility and an additional 500 acres of land for access roads, transmission lines, product line, and a water pipeline. Up to an additional 1,800 acres may be needed for the new town. The applied for rights-of-way corridor is one-half mile wide. However, the right-of-way that would be granted would be much narrower in that corridor. The length of the rights-of-way corridors are unknown at this time, other than the water supply line which would be approximately 40 miles long.

End Use of Product

The synfuel produced by this project may be used directly or indirectly as fuel for Southern California Edison Company's electric generating plants in southern California.

Project Life

Reserves would sustain operation for at least 20 years at the 50,000 bpd level.

Construction Schedule

Construction of the nine modules would start in 1985, with full production occurring by 1991. It is unknown when the Westwater new town would be constructed.

Estimated Work Force Requirements

A peak construction work force of 1,385 would be required during 1985. To operate at full capacity, 1,500 workers would be required. The work force required for this new town construction is not included nor known at this time.

Magic Circle Energy Corporation Cottonwood Wash Project

The Magic Circle Energy Corporation proposes to develop a 6,400-acre Cottonwood Wash Oil Shale Project located approximately 40 miles south of Vernal, Utah (Map 1). Oil shale from an on-site mine would be processed to produce approximately 31,500 bpd of shale oil.

BLM Action Required

Magic Circle has applied for a right-of-way to construct an electrical transmission line across Public Land managed by BLM. The length and width of this right-of-way are unknown. Magic Circle will need rights-of-way to construct two product lines, a water line, and an access road across public land.

End Use of Product

The synfuel produced by this project would be used by local refineries for production of petroleum products.

Project Life

A 20- to 30-year project life is planned, depending on the outcome of current land exchange negotiations.

Construction Schedule

Construction is scheduled to begin in 1982 and to be completed by 1987. Initial commercial production would start 1986, with full-scale production scheduled for February 1988.

Estimated Work Force Requirements

A peak construction work force of 825 would be required during 1985 through 1986. To operate at full capacity, 1,889 workers would be required.

Paraho Development Corporation-Paraho-Ute Project

The Paraho Development Corporation plans to design, construct, and operate a 1,412-acre Paraho-Ute Oil Shale Facility located in northeastern Utah in Uintah County, approximately 50 miles from Vernal, Utah (Map 1).

The capacity of the Paraho-Ute Oil Shale Facility would be 42,000 bpd of hydrotreated shale oil. By-products from the Paraho-Ute Facility would include the cogeneration of 190 megawatts of electrical power (approximately 110 megawatts would be consumed on-site) produced from gas obtained from the Paraho commercial operation, 210 tons per day of anhydrous ammonia, and 100 tons per day of elemental sulfur.

BLM Action Required

Paraho has applied for a right-of-way to construct a 2.06-mile-long plant access road across public land managed by BLM. The company has requested a 250-foot-wide construction right-of-way and 100-foot-wide final right-of-way.

End Use of Product

The shale oil would be pumped to the nearby Chevron line for further distribution.

Project Life

It is estimated that present reserves would permit full operations until the mid-1990's. Additional reserves in the region of the Paraho site would provide sufficient shale to extend full operations more than twenty additional years.

Construction Schedule

Construction is planned to start as soon as necessary permits are approved. Start-up of the first retort is scheduled for late 1985. Hydrotreated oil would be produced for shipment by mid-1985. The entire plant would be operational by 1988.

Estimated Work Force Requirements

A peak construction work force of 2,000 would be required during 1985. To operate at full capacity, 1,500 workers would be required.

Syntana-Utah Project

Syntana-Utah (a joint venture of Quintana Minerals Corporation and Synthetic Oil Corporation) has proposed to construct a shale oil production facility near Bonanza, Utah (Map 1). The facility would initially produce 16,500 bpd of shale oil, with subsequent production reaching 57,000 bpd, if the sponsors can acquire enlarged oil shale resources. The product oil would be moved from the site using a new pipeline that would connect the Syntana-Utah project to a proposed regional collection pipeline.

At the Syntana-Utah facility, 26.1 million tons of oil shale per year would be mined, crushed, and moved via conveyor to a raw shale stockpile. The shale would be retorted, and the crude shale oil would be upgraded to refinery feedstock quality. Shale would be retorted on the surface by a technique that the project sponsors would license from another organization.

Spent shale would be moved from the retort area by conveyor for subsequent surface disposal on the project site. As spent shale disposal proceeds, the surface of the disposal area would be revegetated progressively to match the natural character of the region.

BLM Action Required

Syntana-Utah has applied for the following rights-of-way across public land managed by BLM:

Type	Length (miles)	Width (feet)	Acreage
Water Pipeline	6	40	29
Water Pipeline	28.4	40	137
Natural Gas Line	11	40	53
Oil Pipeline		(to be defined)	
Construction Campsite		(to be defined)	

End Use of Product

The shale oil ultimately would be used as feedstock for refineries in the Petroleum Allocation District (PAD) II or III area (west or southwest U.S.).

Project Life

A 20-year or longer project life is planned.

Construction Schedule

Construction is proposed to begin in 1982 and would continue through 1994. Operations would begin as soon as development allows.

Estimated Work Force Requirements

A peak construction work force of 1,796 would be required during 1985. To operate at full capacity, 2,100 workers would be required.

Tosco Development Corporation Sand Wash Project

Tosco Development Corporation has proposed to develop the Sand Wash Project, an oil shale processing facility located in the central Uintah Basin, approximately 30 miles south of Vernal, Utah (Map 1). Plans are to process and transport 48,300 barrels per day (bpd) of upgraded shale oil. By-products from the Sand Wash project would be 146 long tons per day of sulfur, 130 short tons per day of ammonia, 725 short tons per day of coke, and 3,375 barrels per day of liquefied petroleum gas (LPG).

At the Sand Wash Project mine, 66,000 tons of oil shale per day would be mined, crushed in a primary crusher, hoisted to the surface, and further crushed in a secondary crusher. The oil shale then would be conveyed to the six retorting units and to the hydrocarbon recovery units where oil, gases, and by-products would be recovered using the TOSCO II process. The remaining processed shale would be cooled, moisturized, and conveyed by covered conveyer to a truck-loading point, and then transported to a disposal area. Here the spent shale would be spread, compacted, and ultimately revegetated.

BLM Action Required

Tosco has applied for rights-of-way across Public Land managed by BLM for a shale oil pipeline, underground tunnels, electric transmission lines, a water pipeline, interblock conveyors and utilities, and supplementing and upgrading roads.

End Use of Product

The upgraded shale oil would be transported by pipeline to Rangely, Colorado. The by-products (sulfur, ammonia, and coke) would be transported by truck to railroads or directly to markets. An alternative pipeline follows the Chevron corridor to Salt Lake City, a distance of 160 miles.

Project Life

A 30-year project life is planned.

Construction Schedule

Construction is proposed to begin in 1983 and would continue through 1986. Operations would begin in early 1988.

Estimated Work Force Requirements

A peak construction work force of about 3,500 would be required during 1986. To operate at full capacity, 2,200 workers would be required.

Geokinetics, Inc.

Geokinetics, Inc. has a two-part oil shale proposal in early developmental stages that will only be considered in the context of regional impacts in the Uintah Basin area. The Agency Draw development would be a surface retort facility and the Lofreco development would be an in-situ retort facility.

Proposed Action Description (Agency Draw)

The Agency Draw Development would be located on 22,000 acres in southern Uintah County, Utah (Map 1). Its facilities would occupy about 800 to 1,500 acres. For this development, Geokinetics, Inc. proposes to use room and pillar mining and a surface retort method to produce oil shale, yielding about 5,700 to 10,000 barrels of shale oil per day. In addition to this, secondary recovery via controlled blasting and in-situ retorting of the pillars and surrounding low grade oil shale would yield 1,200 to 10,000 bpd for a total production level of about 5,700 to 20,000 bpd. The facility would also produce 75 to 165 megawatts of electrical power, of which a significant portion would be available for sale. Water, sulfur, and ammonia gas by-products would be produced in undetermined quantities. The spent shale would be transported to a 600 to 1,300 acre disposal site by means of a conveyor system. It would be compacted to a stable, impervious, and erosion-esistant land mass. All runoff would be contained and used for revegetation of the site.

BLM Action Required.

Geokinetics submitted a general application for rights-of-way across Public Land managed by BLM for roads, water pipelines, and power transmission lines. The right-of-way application will be updated for site-specific locations when project plans are more developed.

End Use of Product (Agency Draw).

The product could be refined to liquid fuel.

Project Life (Agency Draw).

A 20-year production life is planned.

Construction Schedule (Agency Draw).

Construction of the Agency Draw mine and plant would begin in 1983. Initial operation of the mine would begin in 1984 and plant operation would begin in 1986. The modified in-situ development would begin in 1989.

Estimated Work Force Requirements (Agency Draw).

A peak construction work force of 1,000 would be required during 1984 through 1985. To operate at full capacity, 500 workers would be required.

Proposed Action Description (Lofreco)

Geokinetics, Inc. proposes to construct and commercially operate the Lofreco development process, a commercial in-situ oil shale facility, on up to 10 noncontiguous State land sections in southern Uintah County (Map 1), which have near-surface beds of oil shale. A new section would be brought into commercial status annually and would yield approximately 5,000 barrels of shale oil per day with a maximum yield of 50,000 bpd for 10 simultaneous units in 1994. In addition, each section would produce 25 to 50 megawatts of electrical power, of which a significant portion would be available for sale. Because this would be an in-situ process, surface disposal of the spent shale would not be necessary. The by-products from the operation would be the product gas (which would be utilized to provide energy) and water (which could possibly be used as a viable resource).

BLM Action Required

Geokinetics has applied for rights-of-way grants across Public Land managed by BLM for roads, water pipelines, and power transmission lines. Right-of-way applications for site-specific locations will be filed when project plans are more developed.

End Use of Product (Lofreco).

The product could be refined to liquid fuel.

Project Life (Lofreco).

Each unit would be in operation for about 20 years.

Construction Schedule (Lofreco).

A modular approach would be implemented in the develoment of all ten sections. Construction of the first unit would begin in 1983 and would be complete in one year, at which point operation of that unit would begin. A new unit would be constructed each subsequent year.

Estimated Work Force Requirements (Lofreco).

It is estimated that about 100 people would be required to construct and operate each unit. Therefore, the total number of personnel required would be 100 the first year, 200 the second year, and so forth, until all 10 units would be in operation.

Sohio Shale Oil Company Asphalt Ridge Project

The Sohio Shale Oil Company Asphalt Ridge Project is in early development stages and only will be considered in the context of cumulative impacts in the Uintah Basin area.

Proposed Action Description

The Asphalt Ridge Project would be located on an 8,400-acre site about 3 miles southeast of Vernal, Utah, in the Asphalt Ridge area (Map 1). It is a two-phase tar sand development plan involving a pilot plant and a commercial plant. The pilot tar sand processing plant would be constructed to develop a solvent-assisted, hot water recovery process and to provide design information for a larger commercial plant to be constructed later at some yet-to-be-determined location. Three open pit mines would provide the tar sand for the pilot plant. The commercial facility would be capable of producing 20,000 barrels of crude bitumen per day. An upgrading unit that would produce high quality crude oil is also planned.

The pilot plant would use water transported via pipeline from the Green River under a currently approved water right for 5 cubic feet per second. This water would be recycled through the use of an on-site wastewater treatment facility.

Processed sand from the pilot plant would be stockpiled near the plant until mined-out areas could be used for final disposal.

BLM Action Required

Sohio has filed a general right-of-way application which identifies that future BLM lands will be needed for facilities from the project site to necessary off-site locations. That application will be updated as the project plans become further defined to show site-specific locations.

End Use of Product

The crude bitumen produced by the pilot plant would be used by a nearby power plant or refinery. The high quality crude oil produced by the commercial plant could be transported to markets in Salt Lake City via Chevron's 10-inch pipeline, or could be transported to midwest or eastern refineries via Amoco's crude oil line to Rangely, Colorado, or could be transported to some new market via a potential future Sohio-constructed pipeline.

Project Life

A 20-year project life is planned.

Construction Schedule

Construction of the pilot plant would begin in 1982; construction of the commercial facility capable of producing 20,000 bpd of crude bitumen would begin in 1988 and would continue through 1989. A project life of 20 years is planned.

Estimated Work Force Requirements

A peak construction work force of 1,350 would be required during 1986 through 1989. To operate at full capacity, 200 workers would be required. Location for employees' housing has not yet been considered but will be in the Vernal area.

APPENDIX D
RESULTS OF PUBLIC SCOPING PROCESS AND PUBLIC PARTICIPATION PLAN

The public plays a very important role in the EIS process, starting with public scoping meetings and continuing through the review of the final EIS. Included in this appendix are the results of the scoping meetings and BLM's plan to encourage public participation throughout the EIS process.

Results of Scoping Process

Following receipt of rights-of-way applications from the seven Uintah Basin Synfuels Development EIS participants, public scoping meetings were arranged for the three communities that would be most affected by and/or involved in the development of the projects - Vernal and Salt Lake City, Utah, and Rangely, Colorado. The purpose of the meetings was to provide an opportunity for the attendees to discuss their concerns about the proposed projects and to identify the significant issues that should be addressed in the EIS. The object was not to seek public support for or opposition to the proposed projects.

Based on an analysis of the issues identified at each of the scoping meetings and the participants' ballots, which identified the three most significant issues in order of priority, the following conclusions about major public concerns were reached.

1. The public perceives socioeconomic impacts as the major issue that should be addressed in the EIS. Areas of concern include the impact of rapid population increase to local communities and the ability of these communities to meet increased demands for housing, schools, utilities, social services, transportation systems, and justice system services.

2. Secondarily, the public is concerned about the adequacy of available water sources to meet the needs of existing users and synfuel development. People are concerned about the effects of project construction, water withdrawal, and spent shale leachate on water quality.

3. The public also is concerned about the effects of the anticipated population increase on consumptive and nonconsumptive uses of wildlife and on crucial and critical habitat.

4. The public is concerned about deterioration of the air quality of the region due to the synfuel industry.

Accordingly, the EIS will address each of these major issue topics, placing most emphasis on socioeconomic concerns.

A detailed report on the public scoping process entitled "Uintah Basin Synfuels EIS Scoping Report" has been prepared. Copies of this report are available from Thom Slater, Project Management Staff, Bureau of Land Management, University Club Building, 136 East South Temple, Salt Lake City, Utah 84111.

Public Participation Plan

	Item	Action Office	Target Dates
1.	Issue Federal Register Notice of Intent to Prepare EIS and dates of scoping meetings.	USO (draft EISO)	7/16/81
2.	Meet with Governor of Utah to sign project management plan.	USO	7/5/81
3.	Issue news release on signing of project management plan.	USO	7/5/81
4.	Issue news release announcing public scoping meetings in Vernal, Rangely, and Salt Lake City.	USO (draft EISO)	7/27/81
5.	Issue news release on results of public scoping meetings - send scoping report to all meeting participants.	USO and EISO (draft EISO)	1/4/82
6.	Distribute EIS preparation plan to applicants, agencies, and to the public (on request).	USO	12/30/81
7.	Periodically, include EIS status report in BLM Vernal District Quarterly Newsletter.	Vernal District	N/A
8.	Issue Federal Register notice on draft EIS availability and public hearings.	USO (draft EISO)	8/13/82
9.	Issue news release on draft EIS availability and public hearings - send also to all scoping meeting participants and others on public mailing list.	USO (draft EISO)	8/13/82
10.	Distribute draft EIS for public review and comments.	USO and EISO	8/13-10/12/82
11.	Issue brief announcement on availability of speakers for interested groups and school classes, regarding draft EIS.	USO and Vernal District	8/13/82
12.	Hold EIS public hearings in Vernal, Rangely, Moab, and Salt Lake City - invite verbal and/or written comments.	EISO, USO and Vernal District	9/13-9/17/82
13.	Send form letter "thank you" response to all those who provide comments on draft EIS.	USO (draft EISO)	As received

Item	Action Office	Target Dates
14. Issue *Federal Register* notice on final EIS availability and 30-day waiting period.	USO (draft EISO)	1/14/83
15. Issue news release on final EIS availability and 30-day waiting period.	USO (draft EISO)	1/14/83
16. Distribute final EIS to agencies, all who commented on the draft, and to others for public information and any additional comment during the 30-day waiting period.	EISO and USO	1/14/83
17. Arrange TV and radio news interview by State Director or District Manager and State/local officials.	USO	2/14/83
18. Issue news release on BLM decisions and availability of BLM decision document - could prepare as a major feature article.	USO	2/14/83

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